

2 N D Q U A R T E R

2000 Operational Report to Congress

J A N U A R Y - M A R C H 2 0 0 0

Overall

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- TVA campgrounds and recreational facilities on reservoirs throughout the region opened for the 2000 season in March with no change in fees and improvements to several recreational and public-use sites. Improvements included construction of courtesy piers to make boat loading and unloading safer and more convenient, installation of additional water and electric hookups, and construction of a new picnic pavilion at Chickamauga Dam. TVA operates about 100 recreation areas, including 11 campgrounds, day-use areas, and boat ramps.
- Although rainfall has been near normal for the first three months of 2000, a 20-inch deficit has occurred during the past 20 months. TVA is working to ensure water will be available for hydro-peaking generation this summer while providing water for navigation purposes and environmental quality benefits. The integrated operation of the river system provides the flexibility to meet multiple demands, even with limited water supply.
- The TVA Public Power Institute at Muscle Shoals was dedicated at a ceremony in January. The institute was established by the TVA Board to initiate research and development work that fulfills TVA's role as an environmental steward and innovator in the electric utility industry. The institute will place special emphasis on renewable energy supply and efficient energy production and use. The institute has a staff of 60 located in an existing building on the Muscle Shoals reservation.
- TVA continues to meet with the Environmental Protection Agency to explore opportunities for resolving an administrative compliance order alleging that maintenance projects at many of TVA's coal-fired units violate new source requirements. TVA fully supports the need to further reduce emissions from coal-fired plants and seeks a resolution that will not put TVA customers and the region at a disadvantage.
- TVA Chief Financial Officer David N. Smith and Executive Vice President Kathryn J. Jackson testified for TVA before the House Water Resources Subcommittee on February 9 regarding TVA debt reduction and activities associated with water and resource management.



Milestones

OPERATIONS

TVA initiated improvements
to its right-of-way
maintenance clearing
program which
virtually eliminated
tree-related outages
from TVA transmission
lines during this past
winter's ice storms in
North Alabama.

- Browns Ferry Unit 3 set a record for TVA nuclear plants on February 28, 2000, by operating non-stop for 500 days. At the end of the quarter, the unit was continuing the record run.
- Following 468 days of continuous operation, Unit 1 at Sequoyah was shut down on February 22, 2000, as planned, for its Cycle 10 outage for refueling and maintenance. The outage was completed on March 18 after 24 days, which met the Business Plan goal of 25 days.
- As published in the January 2000 issue of "World Nuclear Performance," Sequoyah Unit 1 ranked 3rd and Browns Ferry Unit 3 ranked 9th in the world for capability factor, based on data through November 1999.
- The 16 combustion turbines at Johnsonville Fossil Plant have been modified to burn natural gas, in addition to fuel oil. Dual fuel capability provides the flexibility to purchase the lowest cost fuel and also reduces emissions of nitrogen oxides when natural gas is used. The project included installation of a 28-mile pipeline to transport natural gas to the site.
- Work is progressing on adding 680 megawatts of combustion turbine capacity at the Johnsonville and Gallatin fossil plants to provide additional peaking capacity for the power system. The additional capacity will be available for summer 2000.
- The Final Environmental Impact Statement on the TVA proposal to install combustion turbines in Haywood County, Tennessee, was released to the public on March 17. TVA's preferred alternative is to construct up to 1,400 megawatts of simple-cycle capacity at the Lagoon Creek site for operation as early as May 2001.
- Transmission/Power Supply line crews and helicopters assisted in the restoration of power to Owensboro, Kentucky, following a Force-3 tornado on January 3 that caused over \$70 million in damages. Owensboro was declared a federal disaster area.
- TVA initiated improvements to its right-of-way maintenance clearing program which virtually eliminated tree-related outages from TVA transmission lines during this past winter's ice storms in North Alabama. Recent international benchmarking studies by the International Transmission Operations and Maintenance Study showed TVA to be a "best performer" in its right-of-way maintenance activities.

The National Hydro
Association (NHA) is
awarding TVA's
Norris operations
its "Outstanding
Stewardship of
America's Rivers"
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- A total of 49 miles of transmission lines were installed on the TVA system during the quarter, and seven delivery point projects were placed in service. A total of 1153 lightning arrestors were installed as part of the lightning mitigation project. The project provides lightning mitigation for lines which influence the Customer Connection Point Interruption (CCPI) performance indicator.
- Installation of low NOx (nitrogen oxide) burners and other nitrogen oxide reduction methods are underway or complete on 44 of TVA's coal-fired units. This will complete TVA's program for reducing nitrogen oxides to comply with the acid rain control requirements of the Clean Air Act. Construction is nearing completion on a selective catalytic reduction facility for Unit 2 at the Paradise Fossil Plant. The facility is scheduled to be operational by May and is part of a TVA initiative to voluntarily improve local and regional air quality.
- The Maintenance Cost Busters team from John Sevier Fossil Plant is a finalist in this year's Government category for the Rochester Institute of Technology/USA TODAY Quality Cup competition. The team solved a seal problem on boiler-feed pumps that will save about \$1.5 million over the next 20 years. The winner will be announced May 5 in Washington.

RIVER SYSTEM OPERATIONS & ENVIRONMENT

- The Regional Resource Stewardship Council held its first meeting on March 17. The 20-member council was created to provide public input on resource management programs and activities. Public comments at the first meeting focused on extension of tributary reservoir levels. The council was established under the Federal Advisory Committee Act, and the General Services Administration concurred with the council's charter in January.
- The National Hydro Association (NHA) is awarding TVA's Norris operations its "Outstanding Stewardship of America's Rivers" award. TVA won two of the eight awards given in the two years of NHA's program. Norris joins the South Holston Hydro Plant in this honor with national press coverage and recognition slated for April 10-22, culminating in an exhibit on The Mall in Washington, DC, on Earth Day.
- TVA employees won an EPRI Applications Award for creating a computer study that can predict ammonia levels in fly ash and flue gas desulfurization ponds. The system allows power plants to predict environmental emissions levels, assess their significance, and evaluate potential pollutant management schemes through computerized models rather than expensive field investigations and operational scale demonstrations.

The distributors of TVA
power reached
agreement with TVA
on the Wholesale
Energy to Market
pilot program which
provides an
opportunity for
distributors to gain
experience in the
electricity open
market.

FINANCE

- TVA launched a financing program with Edward Jones for a retail-targeted deal. The offering package was referred to as “quints” implying an offering of five different quarterly income-tiered securities. The terms of the individual securities were 5, 10, 15, 20, and 30 years; the average maturity was 18 years. The initial offering was \$200 million, which was increased to \$250 million due to investor demand. The weighted average interest rate of the five securities which make up the “quints” was 7.51 percent.

CUSTOMER SERVICE

- The distributors of TVA power reached agreement with TVA on the Wholesale Energy to Market pilot program which provides an opportunity for distributors to gain experience in the electricity open market. Under terms of the pilot, distributors can arrange for purchases of electricity in the open market to be delivered to TVA if a savings over TVA’s projected costs can be achieved. Distributors may purchase up to 5 percent of their energy usage, which offers them potential savings while minimizing their risk. The program is scheduled to begin in April.
- TVA is working with the Tennessee Valley Public Power Association (TVPPA) and the Tennessee Valley Industrial Committee (TVIC) to implement new rate options for industrial customers. These options would offer potential savings to customers and would increase TVA’s flexibility in meeting summer demand. The options would allow customers with backup generation or customers with fixed price power to sell to TVA when market prices make it advantageous for the customers.
- Distributor staffs and TVA hosted workshops across the Valley to instruct teachers on using TVA’s In Concert With the Environment program to help achieve classroom objectives. Teachers were given materials that can be used throughout the school year to aid in teaching environmental awareness and resource conservation. Participating students will receive a handbook and materials for a do-it-yourself energy audit. The audits generate a customized report that students can use to reduce energy costs in their homes.
- A total of \$2.8 million in economic development loans for business growth in the Tennessee Valley was approved. These loans are expected to leverage an additional \$123 million in capital investment.
- TVA is using its facilities for antenna sites to support the growing demand for wireless personal communication services (PCS). The assistance is consistent with the Telecommunications Act of 1996 (Section 704C) and the August 10, 1995 Presidential Memorandum entitled “Facilitating Access to Federal Property for the Siting of Mobile Services.” To date, licenses have been issued for antennas on 34 TVA sites. Installation of optical ground wire facilities to serve the TVA power system is also expanding the region’s telecommunications capabilities.

Yolanda King, daughter
of the late
Dr. Martin Luther King, Jr.,
spoke at a TVA
commemorative program
for the slain civil rights
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- In the move to emphasize Government-to-Government services, TVA is developing contracts to provide energy services within the region to the U.S. Postal Service, the General Services Administration, and the Army at Fort Campbell. This follows energy projects for Naval Support Activity Millington, Naval Air Station Meridian, and the Arnold Engineering Development Center.
- TVA and its distributor partners approved a program that eliminates security deposits for qualifying commercial and industrial customers. The program is available to all qualifying customers, but is targeted to serve the needs of customers with operations at more than one location.

GENERAL/ADMINISTRATIVE

- TVA has reduced its annual energy usage in subject facilities by 22.8 percent since 1985, which places TVA ahead of schedule in meeting the energy use reduction goals of 20 percent by Fiscal Year 2000 set by the Energy Policy Act of 1992 and 30 percent by Fiscal Year 2005 set by Executive Order 13123.
- A video/study guide on TVA, entitled *Energy for Everyone: The Science, the History and the Future of TVA*, was mailed to regional schools in March. The free educational program for grades 5-8 focuses on TVA's role in preserving and improving the quality of life in the region.
- TVA Police completed the national Cybercrime Assessment study for the U. S. Department of Justice in February. The study, which focused on the capability to combat cybercrime, predicts law enforcement has from 18 to 24 months to gain its footing to contain electronic crimes. The study found that most state and local law enforcement agencies lack adequate training, equipment, and staff to combat electronic crimes.
- TVA Police provided essential services during the Y2K rollover period, remaining in heightened alert throughout the week at critical power facilities. Officers provided law enforcement services, access control, and liaison with other emergency management organizations.
- Yolanda King, daughter of the late Dr. Martin Luther King, Jr., spoke at a TVA commemorative program for the slain civil rights leader. Ms. King's presentation in Knoxville was broadcast to other TVA work sites via fiber optic links. TVA observed Black History Month with a presentation on influential African-American figures by award-winning actor Darryl Van Leer.
- TVA Police, the FBI office in Knoxville, and the American Society for Industrial Security held a seminar in March. More than 70 attendees from six states received briefings on sensitive information policies, encryption, computer intrusions, identity theft, and economic espionage.